



## **FORMAT and FILE SPECIFICATIONS**

**California Coronary Artery Bypass Graft (CABG)  
Outcomes Reporting Program  
(CCORP)**

**Version 5.1**

**Effective for DISCHARGES occurring  
on or after July 1, 2011**





# FORMAT AND FILE SPECIFICATIONS (V 5.1) FOR ONLINE TRANSMISSION

## MINIMUM PC CONFIGURATION

1. Access to a personal computer (with the following minimum configuration)
  - 1 GHz processor, 1GB RAM, 40 GB hard drive (at least 200MB free)
  - High speed Internet connection (preferred) or 56k modem or faster
  - Microsoft Internet Explorer version 7.0 (or higher) with 128-bit Secure Socket Layer (SSL)
  - Adobe Acrobat Reader version 7.0 (or higher)
  - Virus Checking Software
  - File Compression Program

CORC accepts files that are 3MB or less. Data files over 3MB must be compressed in order to be accepted by CORC
2. Internet access (ISP)
3. E-mail

## STANDARD RECORD FORMAT

Deviation from the format will not be accepted

- One reporting facility and time period per file
- Standard ASCII character coding
- Record length 207 characters

## ADDITIONAL REQUIREMENTS

- No packed or binary data
- The data file must be a text file with the extension of ".txt"

## FILE COMPRESSION

Data files may be compressed (zipped) to speed up the file uploading time. The following compression applications are supported and can be obtained from the manufacturer's website:

- gzip
- Pkzip
- Winzip

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**Standard Record Format**

<b><u>Data Element</u></b>	<b><u>Start</u></b>	<b><u>End</u></b>	<b><u>Type &amp; Size</u></b>	
Medical Record Number	1	12	A/N	(12)
Isolated CABG	13	13	N	(1)
Date of Surgery	14	21	N	(8)
Date of Birth	22	29	N	(8)
Patient Age	30	32	N	(3)
Sex	33	33	N	(1)
Race - White	34	34	N	(1)
Race - Black/African American	35	35	N	(1)
Race - Asian	36	36	N	(1)
Race - American Indian/Alaskan Native	37	37	N	(1)
Race - Native Hawaiian/Pacific Islander	38	38	N	(1)
Race - Other	39	39	N	(1)
Hispanic or Latino or Spanish Ethnicity	40	40	N	(1)
Date of Discharge	41	48	N	(8)
Discharge Status	49	49	N	(1)
Date of Death	50	57	N	(8)
Responsible Surgeon Name:				
Last Name	58	82	A	(25)
First Name	83	102	A	(20)
Middle Initial	103	103	A	(1)
Responsible Surgeon CA License Number	104	112	A/N	(9)
Weight (kg)	113	116	N	(4)
Height (cm)	117	120	N	(4)
INR	121	123	N	(3)
Total Bilirubin	124	126	N	(3)
Total Albumin	127	129	N	(3)
Last Creatinine Level	130	132	N	(3)
Diabetes	133	133	N	(1)
Diabetes Control	134	134	N	(1)
Dialysis	135	135	N	(1)
Hypertension	136	136	N	(1)
Infectious Endocarditis	137	137	N	(1)
Infectious Endocarditis Type	138	138	N	(1)
Chronic Lung Disease	139	139	N	(1)
Liver Disease	140	140	N	(1)
Immunocompromise	141	141	N	(1)
Peripheral Arterial Disease	142	142	N	(1)
Cerebrovascular Disease	143	143	N	(1)
Prior Cerebrovascular Accident	144	144	N	(1)
Prior Cerebrovascular Accident When	145	145	N	(1)
CVD – TIA	146	146	N	(1)
CVD – Carotid Stenosis	147	147	N	(1)
CVD – Prior Carotid Surgery	148	148	N	(1)
Previous Coronary Artery Bypass Graft	149	149	N	(1)
Previous Valve	150	150	N	(1)
Previous PCI	151	151	N	(1)

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

<b>Data Element (cont'd)</b>	<b>Start</b>	<b>End</b>	<b>Type &amp; Size</b>	
Previous PCI - Interval	152	152	N	(1)
Prior Myocardial Infarction	153	153	N	(1)
Myocardial Infarction When	154	154	N	(1)
Heart Failure within 2 weeks	155	155	N	(1)
Classification - NYHA	156	156	N	(1)
Cardiogenic Shock	157	157	N	(1)
Resuscitation	158	158	N	(1)
Arrhythmia When	159	159	N	(1)
Arrhythmia Type – VTach/VFib	160	160	N	(1)
Arrhythmia Type – 3 <sup>rd</sup> Degree Heart Block	161	161	N	(1)
Arrhythmia Type – AFib/Aflutter	162	162	N	(1)
Meds - Coumadin (within 24 hours)	163	163	N	(1)
Warfarin Use (within 5 days)	164	164	N	(1)
Number of Diseased Coronary Vessels	165	165	N	(1)
Left Main Disease	166	166	N	(1)
Ejection Fraction Done	167	167	N	(1)
Ejection Fraction	168	170	N	(3)
Ejection Fraction Method	171	171	N	(1)
PA Systolic Pressure Measured	172	172	N	(1)
PA Systolic Pressure	173	176	N	(4)
Insufficiency - Mitral	177	177	N	(1)
Incidence	178	178	N	(1)
Status	179	179	N	(1)
Emergent Reason	180	181	N	(2)
CPB Utilization	182	182	N	(1)
CPB Utilization-Combination Plan	183	183	N	(1)
Internal Mammary Artery Used	184	184	N	(1)
Left Anterior Descending Artery Bypassed	185	185	N	(1)
Valve Procedure	186	186	N	(1)
Aortic Valve	187	187	N	(1)
Aortic Valve Procedure	188	189	N	(2)
Mitral Valve	190	190	N	(1)
Mitral Valve Procedure	191	191	N	(1)
Tricuspid Procedure	192	192	N	(1)
Pulmonic Procedure	193	193	N	(1)
Reoperation for Bleed	194	194	N	(1)
Reintervention - Graft Occlusion	195	195	N	(1)
Deep Sternal Infection	196	196	N	(1)
Neuro – Stroke Permanent	197	197	N	(1)
Pulm – Ventilation Prolonged	198	198	N	(1)
Renal - Renal Failure	199	199	N	(1)
Renal - Dialysis Requirement	200	200	N	(1)
Other - A Fib	201	201	N	(1)
Facility Identification Number	202	207	N	(6)

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**FOOTNOTES**

1. Type & Size indicate data type and length (in parentheses). Data type is defined as:  
A = Alpha  
N = Numeric  
A/N = Alphanumeric

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**Data Field Specifications**

**MEDICAL RECORD NUMBER**

Record Position:	1 through 12
Data Length:	12
Data Type:	Alphanumeric
Harvest Codes:	N/A
Special Instructions:	<ol style="list-style-type: none"><li>1. This field <u>must not</u> be blank.</li><li>2. <b>Duplicate MRNs:</b> DO NOT submit a 2<sup>nd</sup> CABG case when surgery was due to a complication of the initial surgery.</li></ol>
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	170
Coding Classification:	Demographics

**ISOLATED CABG**

Record Position:	13
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	<ol style="list-style-type: none"><li>1. This field <u>must not</u> be blank.</li></ol>
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	N/A; <b>CCORP-specific variable</b>
Coding Classification:	Operative

**DATE OF SURGERY**

Record Position:	14 through 21
Data Length:	8
Data Type:	Numeric
Harvest Codes:	<u>09</u> <u>09</u> <u>9999</u> Month   Day   Year
Special Instructions:	<ol style="list-style-type: none"><li>1. This field <u>must not</u> be blank.</li><li>2. Single-digit months and days <u>must</u> include a preceding zero.</li></ol>
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	610
Coding Classification:	Hospitalization

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**DATE OF BIRTH**

Record Position:	22 through 29
Data Length:	8
Data Type:	Numeric
Harvest Codes:	<u>09</u> <u>09</u> <u>9999</u> Month   Day   Year
Special Instructions:	1. Single-digit months and days <u>must</u> include a preceding zero.
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	130
Coding Classification:	Demographics

**PATIENT AGE**

Record Position:	30 through 32
Data Length:	3
Data Type:	Numeric
Harvest Codes:	N/A
Special Instructions:	N/A
Range:	18 – 100; low = 18, high = 110
Parent/Child Relationship:	N/A
STS Sequence Number:	140
Coding Classification:	Demographics

**SEX**

Record Position:	33
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Male; 2 = Female
Special Instructions:	1. This field <u>must not</u> be blank.
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	150
Coding Classification:	Demographics



FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**RACE - WHITE**

Record Position:	34
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	290
Coding Classification:	Demographics

**RACE – BLACK/AFRICAN AMERICAN**

Record Position:	35
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	300
Coding Classification:	Demographics

**RACE - ASIAN**

Record Position:	36
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	310
Coding Classification:	Demographics

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**RACE – AMERICAN INDIAN/ALASKAN NATIVE**

Record Position:	37
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	320
Coding Classification:	Demographics

**RACE – NATIVE HAWAIIAN/PACIFIC ISLANDER**

Record Position:	38
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	330
Coding Classification:	Demographics

**RACE – OTHER**

Record Position:	39
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	340
Coding Classification:	Demographics

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**HISPANIC OR LATINO OR SPANISH ETHNICITY**

Record Position: 40  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = Yes; 2 = No  
Special Instructions: N/A  
Range: N/A  
Parent/Child Relationship: N/A  
STS Sequence Number: 350  
Coding Classification: Demographics

**DATE OF DISCHARGE**

Record Position: 41 through 48  
Data Length: 8  
Data Type: Numeric  
Harvest Codes: 99 99 9999  
Month Day Year  
Special Instructions: 1. This field must not be blank.  
2. Single-digit months and days must include a preceding zero.  
Range: N/A  
Parent/Child Relationship: N/A  
STS Sequence Number: 620  
Coding Classification: Hospitalization

**DISCHARGE STATUS**

Record Position: 49  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = Alive; 2 = Dead  
Special Instructions: 1. This field must not be blank.  
Range: N/A  
Parent/Child Relationship: N/A  
STS Sequence Number: 6370  
Coding Classification: Mortality

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**DATE OF DEATH**

Record Position:	50 through 57
Data Length:	8
Data Type:	Numeric
Harvest Codes:	<u>09</u> <u>09</u> <u>9999</u> Month   Day   Year
Special Instructions:	1. Single-digit months and days <u>must</u> include a preceding zero.
Range:	N/A
Parent/Child Relationship:	Parent is 'Mortality'; STS sequence # 6360.
STS Sequence Number:	6400
Coding Classification:	Mortality

**RESPONSIBLE SURGEON NAME - LAST**

Record Position:	58 through 82
Data Length:	25
Data Type:	Alpha
Harvest Codes:	N/A
Special Instructions:	1. This field <u>must not</u> be blank. 2. Do not code titles such as "Junior", "Jr.", or "II" (second).
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	N/A; <b>CCORP-specific variable</b>
Coding Classification:	Operative

**RESPONSIBLE SURGEON NAME - FIRST**

Record Position:	83 through 102
Data Length:	20
Data Type:	Alpha
Harvest Codes:	N/A
Special Instructions:	1. This field <u>must not</u> be blank. 2. Do not code titles such as "Junior", "Jr." or "II" (second).
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	N/A; <b>CCORP-specific variable</b>
Coding Classification:	Operative

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**RESPONSIBLE SURGEON NAME – MIDDLE INITIAL**

Record Position:	103
Data Length:	1
Data Type:	Alpha
Harvest Codes:	N/A
Special Instructions:	1. <u>Must be provided</u> if middle name is noted on license via California Medical Board
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	N/A; <b>CCORP-specific variable</b>
Coding Classification:	Operative

**RESPONSIBLE SURGEON CA LICENSE NUMBER**

Record Position:	104 through 112
Data Length:	9
Data Type:	Alphanumeric
Harvest Codes:	N/A
Special Instructions:	1. This field <u>must not</u> be blank.
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	N/A; <b>CCORP-specific variable</b>
Coding Classification:	Operative

**WEIGHT (kg)**

Record Position:	113 through 116
Data Length:	4
Data Type:	Numeric
Harvest Codes:	N/A
Special Instructions:	1. Measured in kilograms 2. Do not code decimal
Range:	40.0 – 170.0; low = 10.0, high = 250.0
Parent/Child Relationship:	N/A
STS Sequence Number:	630
Coding Classification:	Risk Factors

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**HEIGHT (cm)**

Record Position:	117 through 120
Data Length:	4
Data Type:	Numeric
Harvest Codes:	N/A
Special Instructions:	1. Measured in centimeters 2. Do not code decimal
Range:	122.0 – 213.0; low = 20.0, high = 251.0
Parent/Child Relationship:	N/A
STS Sequence Number:	640
Coding Classification:	Risk Factors

**INR**

Record Position:	121 through 123
Data Length:	3
Data Type:	Numeric
Harvest Codes:	N/A
Special Instructions:	1. Do not code decimal
Range:	0.9 – 1.3; low = 0.5, high = 30.0
Parent/Child Relationship:	N/A
STS Sequence Number:	710
Coding Classification:	Risk Factors

**TOTAL BILIRUBIN**

Record Position:	124 through 126
Data Length:	3
Data Type:	Numeric
Harvest Codes:	N/A
Special Instructions:	1. Do not code decimal
Range:	0.2 – 1.3; low = 0.1, high = 50.0
Parent/Child Relationship:	N/A
STS Sequence Number:	720
Coding Classification:	Risk Factors

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**TOTAL ALBUMIN**

Record Position:	127 through 129
Data Length:	3
Data Type:	Numeric
Harvest Codes:	N/A
Special Instructions:	1. Do not code decimal
Range:	3.5 – 5.0; low = 1.0, high = 10.0
Parent/Child Relationship:	N/A
STS Sequence Number:	730
Coding Classification:	Risk Factors

**LAST CREATININE LEVEL**

Record Position:	130 through 132
Data Length:	3
Data Type:	Numeric
Harvest Codes:	N/A
Special Instructions:	1. Do not code decimal
Range:	0.1 – 9.0; low = 0.1, high = 30.0
Parent/Child Relationship:	N/A
STS Sequence Number:	750
Coding Classification:	Risk Factors

**DIABETES**

Record Position:	133
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	780
Coding Classification:	Risk Factors

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**DIABETES CONTROL**

Record Position: 134  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = None; 2 = Diet; 3 = Oral; 4 = Insulin; 5 = Other  
Special Instructions: N/A  
Range: N/A  
Parent/Child Relationship: Parent is "Diabetes"; STS sequence #780  
STS Sequence Number: 790  
Coding Classification: Risk Factors

**DIALYSIS**

Record Position: 135  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = Yes; 2 = No  
Special Instructions: 1. This field must not be blank.  
2. If 'Yes', POSTOPERATIVE DIALYSIS  
REQUIREMENT field must be coded 'No'.  
Range: N/A  
Parent/Child Relationship: N/A  
STS Sequence Number: 810  
Coding Classification: Risk Factors

**HYPERTENSION**

Record Position: 136  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = Yes; 2 = No  
Special Instructions: N/A  
Range: N/A  
Parent/Child Relationship: N/A  
STS Sequence Number: 820  
Coding Classification: Risk Factors



FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**INFECTIOUS ENDOCARDITIS**

Record Position:	137
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	830
Coding Classification:	Risk Factors

**INFECTIOUS ENDOCARDITIS TYPE**

Record Position:	138
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Treated; 2 = Active
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	Parent is "Infectious Endocarditis"; STS sequence #830
STS Sequence Number:	840
Coding Classification:	Risk Factors

**CHRONIC LUNG DISEASE**

Record Position:	139
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = No 2 = Mild 3 = Moderate 4 = Severe
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	860
Coding Classification:	Risk Factors

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**LIVER DISEASE**

Record Position:	140
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	960
Coding Classification:	Risk Factors

**IMMUNOCOMPROMISE**

Record Position:	141
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	970
Coding Classification:	Risk Factors

**PERIPHERAL ARTERIAL DISEASE**

Record Position:	142
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	980
Coding Classification:	Risk Factors

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**CEREBROVASCULAR DISEASE**

Record Position: 143  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = Yes; 2 = No  
Special Instructions: 1. If this is "1" then at least one of the following CVD TYPE fields should be coded as follows: PRIOR CVA, TIA and CAROTID SURGERY must be "1" **OR** CAROTID STENOSIS *must* be "2, 3, or 4"  
2. If this is "2" then ALL of the ABOVE fields *must* be blank.  
Range: N/A  
Parent/Child Relationship: N/A  
STS Sequence Number: 1010  
Coding Classification: Risk Factors

**PRIOR CEREBROVASCULAR ACCIDENT**

Record Position: 144  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = Yes; 2 = No  
Special Instructions: If this is "1" then the PRIOR CVA WHEN field *must* be specified.  
Range: N/A  
Parent/Child Relationship: Parent is "CVD"; STS sequence #1010  
STS Sequence Number: 1020  
Coding Classification: Risk Factors

**PRIOR CEREBROVASCULAR ACCIDENT WHEN**

Record Position: 145  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = Recent (<=2 wk.); 2 = Remote (>2 wk.)  
Special Instructions: If the PRIOR CVA ACCIDENT field is "1" then the PRIOR CVA WHEN field *must* be specified.  
Range: N/A  
Parent/Child Relationship: Parent is "CVA = YES"; STS sequence #1020  
STS Sequence Number: 1030  
Coding Classification: Risk Factors

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**CVD – TIA**

Record Position:	146
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	See CEREBROVASCULAR DISEASE field
Range:	N/A
Parent/Child Relationship:	Parent is "CVD"; STS sequence #1010
STS Sequence Number:	1050
Coding Classification:	Risk Factors

**CVD – CAROTID STENOSIS**

Record Position:	147
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = None; 2 = Right; 3 = Left; 4 = Both
Special Instructions:	See CEREBROVASCULAR DISEASE field
Range:	N/A
Parent/Child Relationship:	Parent is "CVD"; STS sequence #1010
STS Sequence Number:	1070
Coding Classification:	Risk Factors

**CVD – PRIOR CAROTID SURGERY**

Record Position:	148
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	See CEREBROVASCULAR DISEASE field
Range:	N/A
Parent/Child Relationship:	Parent is "CVD"; STS sequence #1010
STS Sequence Number:	1080
Coding Classification:	Risk Factors

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**PREVIOUS CABG (CORONARY ARTERY BYPASS GRAFT)**

Record Position: 149  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = Yes; 2 = No  
Special Instructions: 1. CCORP requires the Null to be filled with "2"  
(for 'No').  
Range: N/A  
Parent/Child Relationship: Parent is "Previous CV Intervention = Yes"; STS  
sequence #1200  
STS Sequence Number: 1215  
Coding Classification: Previous Cardiac Interventions

**PREVIOUS VALVE**

Record Position: 150  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = Yes; 2 = No  
Special Instructions: 1. CCORP requires the Null to be filled with "2"  
(for 'No').  
Range: N/A  
Parent/Child Relationship: Parent is "Previous CV Intervention = Yes"; STS  
sequence #1200  
STS Sequence Number: 1216  
Coding Classification: Previous Cardiac Interventions

**PREVIOUS PCI (PERCUTANEOUS CORONARY INTERVENTION)**

Record Position: 151  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = Yes; 2 = No  
Special Instructions: 1. This field must not be blank. CCORP requires  
the Null to be filled with "2" (for 'No').  
2. If this field is "1" then the INTERVAL field must  
not be blank.  
Range: N/A  
Parent/Child Relationship: Parent is "Previous CV Intervention = Yes"; STS  
sequence #1200  
STS Sequence Number: 1480  
Coding Classification: Previous Cardiac Interventions

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**PREVIOUS PCI - INTERVAL**

Record Position:	152
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = <=6 Hours; 2 = >6 Hours
Special Instructions:	If the PREVIOUS PCI field is "2" then this field <u>must</u> be blank.
Range:	N/A
Parent/Child Relationship:	Parent is "Previous PCI = Yes"; STS sequence #1480
STS Sequence Number:	1520
Coding Classification:	Previous Cardiac Interventions

**PRIOR MI (MYOCARDIAL INFARCTION)**

Record Position:	153
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	<ol style="list-style-type: none"><li>1. If this field is "1" then the MI WHEN field <u>must not</u> be blank.</li><li>2. If this field is "2" then the MI WHEN field <u>must</u> be blank.</li></ol>
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	1540
Coding Classification:	Preoperative Cardiac Status

**MI WHEN**

Record Position:	154
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = <=6 Hrs 2 = >6 Hrs but <24 Hrs 3 = 1 to 7 Days 4 = 8 to 21 Days 5 = >21 Days
Special Instructions:	See PRIOR MI special instructions.
Range:	N/A
Parent/Child Relationship:	Parent is "PRIOR MI = Yes"; STS sequence #1540
STS Sequence Number:	1550
Coding Classification:	Preoperative Cardiac Status

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**HEART FAILURE within 2 weeks**

Record Position:	155
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	If CHF is coded "1" then the NYHA CLASSIFICATION field <u>must not</u> be blank.
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	1580
Coding Classification:	Preoperative Cardiac Status

**CLASSIFICATION - NYHA**

Record Position:	156
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Class I 2 = Class II 3 = Class III 4 = Class IV
Special Instructions:	See CHF special instructions.
Range:	N/A
Parent/Child Relationship:	Parent is "CHF = Yes"; STS sequence #1580
STS Sequence Number:	1585
Coding Classification:	Preoperative Cardiac Status

**CARDIOGENIC SHOCK**

Record Position:	157
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	1620
Coding Classification:	Preoperative Cardiac Status

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**RESUSCITATION**

Record Position:	158
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	1630
Coding Classification:	Preoperative Cardiac Status

**ARRHYTHMIA WHEN**

Record Position:	159
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = None; 2 = Remote (> 30 days); 3 = Recent (<= 30 days)
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	1650
Coding Classification:	Preoperative Cardiac Status

**ARRHYTHMIA TYPE – VTACH/VFIB**

Record Position:	160
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	Parent is "Arrhythmia When = 3 (Recent)"; STS sequence #1650
STS Sequence Number:	1660
Coding Classification:	Preoperative Cardiac Status



FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**ARRHYTHMIA TYPE – 3rd DEGREE HEART BLOCK**

Record Position:	161
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	Parent is "Arrhythmia When = 3 (Recent)"; STS sequence #1650
STS Sequence Number:	1690
Coding Classification:	Preoperative Cardiac Status

**ARRHYTHMIA TYPE – AFIB/AFLUTTER**

Record Position:	162
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	Parent is "Arrhythmia When = 3 (Recent)"; STS sequence #1650
STS Sequence Number:	1700
Coding Classification:	Preoperative Cardiac Status

**MEDS - COUMADIN (within 24 hours)**

Record Position:	163
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	1780
Coding Classification:	Preoperative Medications

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**WARFARIN USE (within 5 days)**

Record Position:	164
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	N/A; <b>CCORP-specific variable</b>
Coding Classification:	Preoperative Medications

**NUMBER DISEASED VESSELS**

Record Position:	165
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = None 2 = One 3 = Two 4 = Three
Special Instructions:	1. Left main disease ( $\geq 50\%$ ) is counted as Two vessels (LAD and Circumflex).
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	1930
Coding Classification:	Hemodynamics / Cath / Echo

**LEFT MAIN DISEASE**

Record Position:	166
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	1940
Coding Classification:	Hemodynamics / Cath / Echo

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**EJECTION FRACTION DONE**

Record Position:	167
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	1950
Coding Classification:	Hemodynamics / Cath / Echo

**EJECTION FRACTION (%)**

Record Position:	168 through 170
Data Length:	3
Data Type:	Numeric
Harvest Codes:	N/A
Special Instructions:	1. Do not code decimal
Range:	5.0 – 90.0; low = 1.0, high = 99.0
Parent/Child Relationship:	Parent is “EF Done = Yes”; STS sequence #1950
STS Sequence Number:	1960
Coding Classification:	Hemodynamics / Cath / Echo

**EJECTION FRACTION METHOD**

Record Position:	171
Data Length:	1
Data Type:	Numeric
Harvest Codes:	2 = LV Gram 3 = Radionucleotide 4 = Estimate 5 = ECHO 6 = MRI/CT 9 = Other
Special Instructions:	If the EJECTION FRACTION DONE field is “2” then this field <u>must</u> be blank.
Range:	N/A
Parent/Child Relationship:	Parent is “EF Done = Yes”; STS sequence #1950
STS Sequence Number:	1970
Coding Classification:	Hemodynamics / Cath / Echo

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**PA SYSTOLIC PRESSURE MEASURED**

Record Position: 172  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = Yes; 2 = No  
Special Instructions: N/A  
Range: N/A  
Parent/Child Relationship: N/A  
STS Sequence Number: 2020  
Coding Classification: Hemodynamics / Cath / Echo

**PA SYSTOLIC PRESSURE**

Record Position: 173 through 176  
Data Length: 4  
Data Type: Numeric  
Harvest Codes: N/A  
Special Instructions: 1. Do not code decimal  
Range: 15.0 – 30.0; low = 10.0, high = 150.0  
Parent/Child Relationship: Parent is “PA Systolic Pressure Measured = Yes”; STS sequence #2020  
STS Sequence Number: 2030  
Coding Classification: Hemodynamics / Cath / Echo

**INSUFFICIENCY - MITRAL**

Record Position: 177  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 0 = None  
1 = Trivial/Trace  
2 = Mild  
3 = Moderate  
4 = Severe  
Special Instructions: 1. Enter highest level recorded in chart.  
2. STS Users – fill null with ‘0’ for None  
Range: N/A  
Parent/Child Relationship: Parent is “VD - Mitral = Yes”; STS sequence #2160  
STS Sequence Number: 2270  
Coding Classification: Hemodynamics / Cath / Echo

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**INCIDENCE**

Record Position: 178  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = First cardiovascular surgery  
2 = First re-op cardiovascular surgery  
3 = Second re-op cardiovascular surgery  
4 = Third re-op cardiovascular surgery  
5 = Fourth or more re-op cardiovascular surgery  
  
Special Instructions: N/A  
Range: N/A  
Parent/Child Relationship: N/A  
STS Sequence Number: 2380  
Coding Classification: Operative

**STATUS**

Record Position: 179  
Data Length: 1  
Data Type: Numeric  
Harvest Codes: 1 = Elective  
2 = Urgent  
3 = Emergent  
4 = Emergent Salvage  
  
Special Instructions: 1. This field must not be blank.  
Range: N/A  
Parent/Child Relationship: N/A  
STS Sequence Number: 2390  
Coding Classification: Operative

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**EMERGENT REASON**

Record Position:	180 through 181
Data Length:	2
Data Type:	Numeric
Harvest Codes:	1 = Shock with circulatory support 2 = Shock without circulatory support 3 = Pulmonary edema 4 = AEMI 5 = Ongoing Ischemia 6 = Valve Dysfunction 7 = Aortic Dissection 8 = Angiographic Accident 9 = Cardiac Trauma 10 = Infected Device 11 = Syncope 12 = PCI/CABG Hybrid 13 = Anatomy
Special Instructions:	If the STATUS field is "3" then this field <u>must not</u> be blank.
Range:	N/A
Parent/Child Relationship:	Parent is "Status = Emergent"; STS sequence #2390
STS Sequence Number:	2410
Coding Classification:	Operative

**CPB UTILIZATION**

Record Position:	182
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = None 2 = Combination 3 = Full
Special Instructions:	1. If this field is "2" then CPB UTILIZATION-COMBINATION PLAN <u>must not</u> be blank.
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	2740
Coding Classification:	Operative

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**CPB UTILIZATION-COMBINATION PLAN**

Record Position:	183
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Planned 2 = Unplanned
Special Instructions:	See CPB Utilization special instructions.
Range:	N/A
Parent/Child Relationship:	Parent is "CPB Utilization" with valid value of 2 (Combination); STS sequence #2740
STS Sequence Number:	2750
Coding Classification:	Operative

**IMA ARTERY USED**

Record Position:	184
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Left IMA 2 = Right IMA 3 = Both IMAs 4 = No IMA
Special Instructions:	1. STS Users – fill null with '4' (No IMA)
Range:	N/A
Parent/Child Relationship:	Parent is "OpCAB = Yes"; STS sequence #2437
STS Sequence Number:	3210
Coding Classification:	Coronary Bypass

**LEFT ANTERIOR DESCENDING ARTERY BYPASSED**

Record Position:	185
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	N/A; <b>CCORP-specific variable</b>
Coding Classification:	Coronary Bypass

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**VALVE PROCEDURE**

Record Position:	186
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	2440
Coding Classification:	Operative

**AORTIC VALVE**

Record Position:	187
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	Parent is "OpVALVE = Yes"; STS sequence #2440
STS Sequence Number:	4270
Coding Classification:	Valve Surgery



FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**AORTIC VALVE PROCEDURE**

Record Position:	188 through 189
Data Length:	2
Data Type:	Numeric
Harvest Codes:	1 = Replacement 2 = Repair/Reconstruction 3 = Root reconstruction with valved conduit 4 = Replacement and insertion aortic non-valved conduit 5 = Resuspension AV without replacement of ascending aorta 6 = Resuspension AV with replacement of ascending aorta 7 = Apico-aortic conduit (Aortic valve bypass) 8 = Autograft with pulmonary valve – Ross procedure 9 = Homograft 10 = Valve sparing root reimplantation (David) 11 = Valve sparing root remodeling (Yacoub)
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	Parent is “Aortic Valve = Yes”; STS sequence #4270
STS Sequence Number:	4280
Coding Classification:	Valve Surgery

**MITRAL VALVE**

Record Position:	190
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	Parent is “OpVALVE = Yes”; STS sequence #2440
STS Sequence Number:	4351
Coding Classification:	Valve Surgery

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**MITRAL VALVE PROCEDURE**

Record Position:	191
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Repair 2 = Replacement
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	Parent is "Mitral Valve = Yes"; STS sequence #4351
STS Sequence Number:	4352
Coding Classification:	Valve Surgery

**TRICUSPID PROCEDURE**

Record Position:	192
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = No 2 = Annuloplasty only 3 = Replacement 4 = Reconstruction with annuloplasty 5 = Reconstruction without annuloplasty 6 = Valvectomy
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	Parent is "OpVALVE = Yes"; STS sequence #2440
STS Sequence Number:	4500
Coding Classification:	Valve Surgery

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**PULMONIC PROCEDURE**

Record Position:	193
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = No 2 = Replacement 3 = Reconstruction 4 = Valvectomy
Special Instructions:	N/A
Range:	N/A
Parent/Child Relationship:	Parent is "OpVALVE = Yes"; STS sequence #2440
STS Sequence Number:	4560
Coding Classification:	Valve Surgery

**REOPERATION FOR BLEED**

Record Position:	194
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	1. This field <u>must not</u> be blank. CCORP requires the Null to be filled with "2" (for 'No').
Range:	N/A
Parent/Child Relationship:	Parent is "Post-Op Events = Yes"; STS sequence #5759
STS Sequence Number:	5760
Coding Classification:	Postoperative Events

**REINTERVENTION - GRAFT OCCLUSION**

Record Position:	195
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	1. This field <u>must not</u> be blank. CCORP requires the Null to be filled with "2" (for 'No').
Range:	N/A
Parent/Child Relationship:	Parent is "Post-Op Events = Yes"; STS sequence #5759
STS Sequence Number:	5790
Coding Classification:	Postoperative Events

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**DEEP STERNAL INFECTION**

Record Position:	196
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	1. This field <u>must not</u> be blank. CCORP requires the Null to be filled with "2" (for 'No').
Range:	N/A
Parent/Child Relationship:	Parent is "Post-Op Surgical Site Infection = Yes"; STS sequence #5841
STS Sequence Number:	5860
Coding Classification:	Postoperative Events

**NEURO – STROKE PERMANENT**

Record Position:	197
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	1. This field <u>must not</u> be blank. CCORP requires the Null to be filled with "2" (for 'No').
Range:	N/A
Parent/Child Relationship:	Parent is "Post-Op Events = Yes"; STS sequence #5759
STS Sequence Number:	6030
Coding Classification:	Postoperative Events

**PULM – VENTILATION PROLONGED**

Record Position:	198
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	1. This field <u>must not</u> be blank. CCORP requires the Null to be filled with "2" (for 'No').
Range:	N/A
Parent/Child Relationship:	Parent is "Post-Op Events = Yes"; STS sequence #5759
STS Sequence Number:	6130
Coding Classification:	Postoperative Events

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**RENAL - RENAL FAILURE**

Record Position:	199
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	1. This field <u>must not</u> be blank. CCORP requires the Null to be filled with "2" (for 'No').
Range:	N/A
Parent/Child Relationship:	Parent is "Post-Op Events = Yes"; STS sequence #5759
STS Sequence Number:	6200
Coding Classification:	Postoperative Events

**RENAL - DIALYSIS REQUIREMENT**

Record Position:	200
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	1. This field <u>must not</u> be blank. CCORP requires the Null to be filled with "2" (for 'No'). 2. If the (pre-op risk factor) DIALYSIS field is "1" then this field <u>must</u> be <u>"2"</u> .
Range:	N/A
Parent/Child Relationship:	Parent is "Post-Op Renal Failure = Yes"; STS sequence #6200
STS Sequence Number:	6210
Coding Classification:	Postoperative Events

**OTHER - A FIB**

Record Position:	201
Data Length:	1
Data Type:	Numeric
Harvest Codes:	1 = Yes; 2 = No
Special Instructions:	1. This field <u>must not</u> be blank. CCORP requires the Null to be filled with "2" (for 'No').
Range:	N/A
Parent/Child Relationship:	Parent is "Post-Op Events = Yes"; STS sequence #5759
STS Sequence Number:	6330
Coding Classification:	Postoperative Events

FORMAT AND FILE SPECIFICATIONS (V 5.1)  
FOR ONLINE TRANSMISSION

**FACILITY IDENTIFICATION NUMBER**

Record Position:	202 through 207
Data Length:	6
Data Type:	Numeric
Harvest Codes:	N/A
Special Instructions:	1. This field <u>must not</u> be blank. 2. <i>Must</i> use OSHPD-issued six-digit number unique <u>to each hospital</u> .
Range:	N/A
Parent/Child Relationship:	N/A
STS Sequence Number:	N/A; <b>CCORP-specific variable</b>
Coding Classification:	Hospitalization

Questions about the content of this document can be directed to:

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